



<http://dx.doi.org/10.11646/zootaxa.3972.4.7>

<http://zoobank.org/urn:lsid:zoobank.org:pub:B84CA519-8FDC-493F-ABFA-7B60126E30A5>

## ***Hyphessobrycon lucenorum* (Characiformes: Characidae), a new species from the rio Madeira basin, Rondônia State, Brazil**

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### **Abstract**

A new species of characid is described from the upper rio Machado, a tributary of the rio Madeira basin, Rondônia, Brazil. *Hyphessobrycon lucenorum* can be distinguished from all congeners by the unique combination of the presence of a conspicuous rounded humeral blotch and a broad and diffuse longitudinal stripe. The new species is included within the *Hyphessobrycon agulha* group. The high number of endemic species of fishes occurring in the headwater tributaries of three river systems (rio Madeira, rio Tapajós, and rio Paraguai) draining the watershed defined by the Chapada dos Parecis is discussed.

**Key words:** *Hyphessobrycon agulha* group, *Hyphessobrycon heterorhabdus* group, Chapada dos Parecis, endemism

### **Resumo**

Uma espécie nova de caracídeo é descrita do rio Machado, um afluente da bacia do rio Madeira, Rondônia, Brasil. *Hyphessobrycon lucenorum* distingue-se de todos os congêneres pela combinação única da presença de uma conspicua mancha umeral arredondada e uma ampla faixa longitudinal difusa. A espécie nova é incluída dentro do grupo *Hyphessobrycon agulha*. O alto número de espécies endêmicas ocorrendo em tributários de cabeceira de três diferentes bacias (rio Madeira, rio Tapajós e rio Paraguai) que drenam do divisor de águas definido pela Chapada dos Parecis é discutido.

### **Introduction**

*Hyphessobrycon* Durbin 1908 is one of the most diverse genera of small characid fishes, comprising 136 species currently considered as valid (Lima *et al.*, 2003, 2014). The genus is distributed from southern Mexico to the Río de La Plata in Argentina, with its largest diversity found in the Amazon basin, where approximately half of the known species occur (pers. obs.).

The monophyly of *Hyphessobrycon* has been repeatedly questioned (e.g., Weitzman & Fink, 1983; Weitzman & Palmer, 1997) and has been put in doubt by Eigenmann (1917) himself. Recent phylogenies of the Characidae, although including relatively few *Hyphessobrycon* species, did not recover them as a monophyletic group (Mirande, 2010; Javonillo *et al.*, 2010; Oliveira *et al.*, 2011). Nonetheless, in the absence of a definition of the genus based on apomorphic features, *Hyphessobrycon* continues to be diagnosed by the combination of the non-exclusive characters first proposed by Durbin (in Eigenmann, 1908) and Eigenmann (1918). These are: lateral line incomplete; premaxillary teeth in two series with an inner series of five teeth; second suborbital (=third infraorbital *sensu* Weitzman, 1962) not in contact with the preopercle ventrally; few maxillary teeth; naked caudal fin, and presence of the adipose fin.

In a book on the fishes from the rio Madeira basin in Brazil, Lima *et al.* (2013) recently recorded 12 species of